

ABSTRACT OF THE DISCLOSURE

In a medical guide wire 1, a rear half of a leading bulge portion (ellipsoidal helical spring) 5 forms a truncated cone shaped front catheter engagement portion 8. An inner wall of a balloon catheter 2 forms a spiral groove 9. The spiral groove 9 fits into the front catheter engagement portion 8 to provisionally connect the balloon catheter 2 to the front catheter engagement portion 8. The medical guide wire 1 and the balloon catheter 2 are inserted into the blood vessel with one single step procedure when the medical guide wire 1 is introduced into the blood vessel to place the balloon portion 10 at the stricture blood vessel area (P) to cure the stricture blood vessel area (P).